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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/629,682

07/30/2003

Mark Koops

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EXAMINER

MURRAY, DANIEL C

ART UNIT

PAPER NUMBER

2443

NOTIFICATION DATE

DELIVERY MODE

03/22/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/629,682	Applicant(s) KOOPS ET AL.	
	Examiner DANIEL C. MURRAY	Art Unit 2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on 30OCT2009. **Claims 1, 2, and 5-20** are now pending in the present application. **This Action is made FINAL.**

Claim Objections

2. **Claim 16** is objected to because of the following informalities:
 - **Claim 16**, line 2; the acronym "IPsec" needs to be clearly defined upon first use.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was

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commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 1, 2, 5-10, 13, 18, and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)**.

a) Consider **claim 1**, Moyer et al. clearly show and disclose, a network management system for creating and implementing a service on a network (abstract), said network management system comprising: means for acquiring policy rules comprising service rules 220 (service template) which create the service and implementation rules 220 (service template) which implement the service (the service template of Moyer performs both the functions of the service rules and implementation rules)(abstract, column 2 lines 23-46, column 3 lines 50-67, column 4 lines 1-26); wherein said implementation rules 220 (service template) for implementing the service comprise technology rules 222 (device template) and equipment rules 222 (device template)(the device template of Moyer performs the function of both the technology rules and equipment rules)(abstract, column 2 lines 23-46, column 3 lines 57-67, column 4 lines 1-4), wherein the inferring means (derives) correlates the service rules 220 (service template) with the technology rules 222 (device template)(column 3 lines 57-67, column 4 lines 1-4 lines 58-64), wherein the technology rules 222 (device template) determine technology to use in the implementation of the service based on attributes of the service and equipment in the network (abstract, column 2 lines 23-47, column 3 lines 50-67, column 4 lines 1-26), and wherein the service is defined by the service rules 220 (service template) independently of the technology and specification of the network equipment (abstract, column 2 lines 23-28, column 3 lines 57-62). However, Moyer et al. does not specifically disclose means for determining

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commands corresponding to said policy rules; means for transmitting the determined commands to network elements of the network; and means for inferring said policy rules to determine said commands.

McGuire shows and discloses deployment and management of devices that control the transmission of data over a network, such as switches, routers, firewalls, load balancers, and the like, and more particularly to a system and method that provides for automated deployment and management of a variety of different types of such network devices, wherein McGuire discloses means for determining commands corresponding to said policy rules (abstract, paragraph [0008], [0009], [0043], [0044]); means for transmitting the determined commands to network elements of the network (abstract, paragraph [0008], [0009], [0043], [0044]); and means for inferring said policy rules to determine said commands (abstract, paragraph [0008], [0009], [0043], [0044]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of McGuire and Moyer et al. since both concern the provisioning, configuration, and management of network services and devices and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining and applying commands necessary to enable a device, as taught by, McGuire into the system of Moyer et al. for the purpose of automating a provisioning and management system (McGuire; abstract), thereby minimizing or eliminating the need to manually configure devices.

b) Consider **claim 2**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire clearly show and disclose, the network management system claimed in claim 1, wherein said inference means comprises an inference engine provided in the network management system

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and external to the network comprising the network elements (Moyer; figure 2, figure 5, column 3 lines 25-37, column 6 lines 60-64).

c) Consider **claim 5**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service rules specify conditions and timing for creating the service (abstract, column 2 lines 42-47, column 3 lines 57-62). However, Moyer et al. as modified by McGuire et al. does not specifically disclose the service rules are provided externally from the network management system.

Nonetheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a database contain data used by a system, in this case service rules, could be implemented either internally (e.g. at the same sight or on the same machine) or externally (e.g. remotely either of site or on the same site but in a different machine than that housing the main system) from the system.

d) Consider **claim 6**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the technology rules specify which protocol to use for the service based on the attributes of the equipment in the network and wherein the equipment rules model how to select the technology rules based on the attributes of the equipment (Moyer; column 3 lines 57-67, column 4 lines 1-26).

e) Consider **claim 7**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service is designed by a developer independently from specifications of equipment and technology specified in the implementation rules and wherein the implementation rules are dynamically implemented after the determining means determines applicable implementation rules (Moyer; column 2 lines 23-47, column 57-65, column 4 lines 6-26).

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f) Consider **claim 8**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service is rules designed by an operator without requiring specific knowledge of equipment and technology of the network for the service (Moyer; abstract, column 1 lines 55-63).

g) Consider **claim 9**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the implementation rules specify implementation specific details of the service (Moyer; column 3 lines 57-65, column 4 lines 6-26).

h) Consider **claim 10**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the implementation rules specify attributes of the service (Moyer; column 3 lines 57-65, column 4 lines 6-26).

i) Consider **claim 13**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the equipment rules are used to model how the rules must be selected for a particular equipment type (Moyer; abstract, column 3 lines 65-67, column 4 lines 1-2).

j) Consider **claim 18**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the equipment is a router (Moyer; figure 1, column 1 lines 15-37).

k) Consider **claim 19**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the network comprises IP routers (Moyer; figure 1, column 1 lines 15-37).

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7. **Claims 11, 16, 17, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)** in further view of **Newton, Harry (Newton's Telecom Dictionary)**.

a) Consider **claim 11**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service is a virtual private network. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the service is a virtual private network.

Newton shows and discloses that a virtual private network is a service that can be implemented on a network (Newton, definition of VPN (virtual private network) page 982-983).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of creating a service on a public network with the characteristics of a private network.

b) Consider **claim 16**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the technology is IPsec protocol. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the technology is IPsec protocol.

Newton shows and discloses that the technology IPsec protocol can be implemented on a network (Newton, definition of IPsec (Internet Protocol Security) page 501).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of creating a secure service on a public network.

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c) Consider **claim 17**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the technology is multi-protocol label switching (MPLS) tunnels. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the technology is multi-protocol label switching (MPLS) tunnels.

Newton shows and discloses that the technology multi-protocol label switching (MPLS) tunnels can be implemented on a network (Newton, definition of MPLS (multi-protocol label switching) page 604).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of making forwarding decisions on a network.

d) Consider **claim 20**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the network comprises asynchronous transfer mode (ATM) switches. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the network comprises asynchronous transfer mode (ATM) switches.

Newton shows and discloses that the network comprises asynchronous transfer mode (ATM) switches. (Newton, definition of ATM switch page 124).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of implementing a network using ATM switches.

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8. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)** in further view of **Ballantine et al. (US Patent # US 6,446,123 B1)**.

a) Consider **claim 12**, and **as applied to claim 1 above** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the technology to be used is determined based on a number of sites involved in a particular network.

Ballantine et al. show and disclose monitoring network performance, traffic, inventory, breakdown, repair activity, and other conditions, alerts a user to anticipated problems based upon projection of performance and related data, wherein the technology to be used is determined based on a number of sites involved in a particular network (abstract, column 5 lines 35-62).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining the technology to use based on network information (i.e. network inventory), as taught by, Ballantine et al. into the system of Moyer et al. as modified by McGuire et al. for the purpose of planning based on network information (Ballantine; column 5 lines 35-44).

9. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)** in further view of **Abaye et al. (US Patent # US 7,024,475 B1)**.

a) Consider **claim 14**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1.

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However, Moyer et al. as modified by McGuire et al. does not specifically disclose the particular equipment type is selected based on their capacity.

Abaye et al. show and disclose performance modeling of a communications system, such as one that provides for communications of streaming data, wherein the particular equipment type is selected based on their capacity (column 1 lines 64-67, column 2 lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate selection of equipment based on their capacity, as taught by, Abaye et al. into the system of Moyer et al. as modified by McGuire et al. for the purpose of proper network planning when deploying a communications systems (Abaye; column 1 lines 64-67, column 2 lines 1-10).

10. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)** in further view of **Westfall et al. (US Patent # US 6,449,650 B1)**.

a) Consider **claim 15**, and **as applied to claim 1 above**, Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service provides video conferences. However, Moyer et al. as modified by McGuire et al. does not specifically disclose wherein the service provides video conferences.

Westfall et al. show and disclose network policy management system and methods define service templates. The service templates contain information on the topologies of services such as video calls, web services, order processing applications, or the like, wherein the service provides video conferences (abstract, column 7 lines 45-58).

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One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Westfall et al. and Moyer et al. as modified by McGuire et al. since both concern configuring networks to provide services and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate implementing video conferencing services, as taught by, Westfall et al. into the system of Moyer et al. as modified by McGuire et al. for the purpose of providing video conferencing services (Westfall; column 7 lines 45-58), thereby allowing users to establish a vide conference.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 2, and 5-14 and have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US 2002/0178380 A1
- US 2002/0026503 A1
- US 7,603,445 B1
- US 7,457,853 B1
- US 6,313,863 B1
- US 6,330,586 B1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MURRAY whose telephone number is 571-270-1773. The examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571)-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/D. C. M./

Examiner, Art Unit 2443

/Tonia LM Dollinger/

Supervisory Patent Examiner, Art Unit 2443